

Coll.  
729(D)  
IV 3

1907

CASH

UNIVERSITY OF CHICAGO



J. A. G. Rehn.

July 1907.

S M T W T F S

1 2 3 4 5 6

7 8 9 10 11 12 13

14 15 16 17 18 19 20

21 22 23 24 25 26 27

28 29 30 31

Aug.

1 2 3

~~4 5 6~~

4 5 6 7 8 9 10

11 12 13 14 15 16 17

18 19 20 21 22 23 24

25 26 27 28 29 30 31

quinn

the you

spot shows

cash

with

you





## Tentative itinerary

Leave Phila	July 5.
Arr. El Paso.	mon July 9 (4)
Leave " "	even. " 11
Arr. Alamogordo.	even. " "(2)
Leave " "	mon " 14
Arr. Cloudcroft	mon. " 14 (3)
Leave " "	aft. " 17
Arr. Heming	mon. " 18 (1)
Leave " "	" 19
Arr. Silver City	" 19 (3)
Leave " "	" 22
Arr. Benson	after. " 22
Leave " "	" 23
Arr. Herford	" 23
Leave " "	Aug. 13
Arr. Tucson	" 14
Leave " "	" 16
Arr. Yuma	" 17
Leave " "	" 21
Lvo Angeles	" 22

## Trees.

Pinus edulis.

Has short curved needles.

P. cembroides

- Similar to edulis but has finer needles.

P. ponderosa Has moderately long (3-4 inch) needles.

Pseudotsuga. Has peculiar loosely scaled cones.

Populus tremuloides Has very small leaf with finely crenulate-dentate margins.

Quercus gambelii Has typical deeply notched rounded lobed oak leaf.

Q. emoryi Has elongate leaf hardly crenulate.

Rhoberlinia Is that peculiar spiny twigged bush which we met with in N. Mex.

Mr. Skinner says that  
Hooglen has better  
accommodations than  
Dodd. He is Superintendent  
of the Water supply of  
Dorchester. Mail address  
Palmerlee. An alternative  
is Mr. Boerner of the  
same mail address.

4  
Stroke. ~~Low~~ <sup>High</sup> pulse,  
skin hot & dry. Rest in  
shade, cold water to  
head and wrists. No  
stimulants.

Head exhaustion. ~~High~~  
Low pulse, skin moist  
and damp. Shade (if  
possible), stimulant.

Sodium sulphide in  
solution for red drip  
preservative lotion. Also  
dust naphthalin in the  
clothes.



Pinus strobiformis Mex. Wh.  
San Luis Mts. at 7874 feet. Pine-

Animas Peak 8783 "

San Jose Mts. Imura 8337 "

Huachuca Mts. descends as low  
as 6650 in Miller Canyon.

A distinctly Canadian species  
associated with Douglas  
Spruce, Aspen & Gambel Oak.

Pinus cembroides Mex. Pinon.

Big Hatchet Mt. ~~8500~~ feet. above  
6000 feet.

San Luis Mts 5990 - summit

Huachuca " from 6000 upward.  
to 9000 feet.

Pinus ponderosa Bull Pine

Huachuca from 7000 upward.  
A Transition form. No 8500

Pseudotsuga mucronata

Most abundant tree of the  
Douglas Spruce

zone on the San Luis. ~~San~~  
 Animas & Huachuca Mts  
 on all of which it reaches  
 the summits. Sometimes  
 descends as low as 6000 feet  
 as in Miller Canyon.

Juniperus monosperma  
 One seed juniper.

Upper Sonoran: from 4134 to  
 6129 feet.

Juniperus pachyphloea  
 Alligator juniper.

From 4446 to 8350 feet.

Populus tremuloides Aspen.  
 Canadian. from 7690 to

9472 feet. Largest aspens were  
 those on Huachuca peaks.

Quercus gambelii Gambel Oak  
 Canadian. In Huachuca  
 from 7000 to 9472 feet.

21  
Mercurus unonji Emory  
Upper Tertiary & sometime <sup>Cal.</sup>  
into the Transition. Up  
to 6500 feet.

July 5, 07.

Left North Hills. at 6. 58

10.11. Port 5 min. Sat.

Pushed lunch over to men &  
 made up train & sorted  
 arrival. Left  
 here with five Pullman  
 cars of which one of which  
 was a special car. Sat  
 on and to 12 P.M.

July 6

Left at 4. 51 P.M. between  
 Fayetteville & Knoxville.

The scenery fine very rolling  
 rounded hills and fertile  
 streams. Red shale  
 country.



July 9, 07.

East of the Franklin  
Hills to summit of  
South peak outlying  
point ab. 5000 feet  
down on south face of  
same.

Bröletia immature  
mature on Corolla

Occasional mature

Common immature

Walking sticks probably

two species all in

green wood. Fraxinifera

in grass but the young are

wood. ~~moss~~ <sup>from</sup> resembles

terminal twigs of

green wood. Taken

by beating. Frax.

individual noticed

by swaying of branch

covered by insect to  
 escaped detection. Most  
 of the all on greasewood.  
 All other material  
 on bare rock and soil.

Pictures film 2.  
 no 1 & 2 M. H. & R. in  
 south butterfly of Franklin  
 Range.

Film No. 2.

No. 3 July 10. Top of  
 Grande mesa point about  
 3 miles S. of El Paso.

No. 4 Franklin Mts. from  
 N. W. mesa. El Paso

No. 5 Richwood's hills  
 edge of N. W. mesa. El Paso

Film No. 2.

No. 6. 3/4 Pass & S.W.  
Cloudcraft engine at  
Orboggan.

Film No. 3.

Films

Nos 1 - 6. Cloudcraft  
Snaps open shutter

Film No. 4

No. 1 Looking down Fremont  
Canyon from Cloudcraft  
No. 2 morning snap 1/4 open day  
Across upper Fremont  
Canyon. Open stops snap

No. 3  
Morgan Island at  
same point open day  
No. 4  
J. H. R. Little

No. 5

## Film No. 5

No. 1. Commercial quass in  
rivers near flat. 1/2 m. N. ofNo. 2. West of Apalachee  
bottom at Little River.No. 3. Brown Apalachee  
bottom. Little River.

No. 4.

No. 5. Florida Mts., N. W.

No. 6. Film No. 6.

No. 1.

No. 2.

No. 3.

No. 4.



May

No. 1

May

No. 2

July 23. 07.

July 24. 1907.

We left Tucson at 5:30  
A.M. with a driver,  
two horses and a  
mountain wagon. We  
passed around the  
Tucson range and  
cleared them eight  
o'clock. From there  
we worked on  
the flat for a distance  
of about thirty-five  
miles from Tucson.  
On the trip we had  
two showers to pass  
through. At Pochos

Rough we took water,  
cooked a lunch  
fed the horses and  
then decided to proceed  
further an arrangement  
west of here with  
no badly flooded  
and a steady  
rain coming on  
we were satisfied  
to camp in the  
wagon in a hole  
about three feet  
above the flooded  
flat.

Wilson No. 7

1

2

3

4

5

6

## altitudes -

El Paso	3687	
Los Angeles	267	
Merced	173	
Pasadena	824	
San Diego	13	
Summit Canyon Pass		3820
Denning	4315	
Silver City	5835	
Williams	6748	
Winslow	4848	





74

Pullman to N. Orleans & tips	18	50
Meals to N. Orleans 6.	14	75
Pullman to El Paso & tips	17	75
Meals to El Paso 11.	24	50
El Paso hotel 4 days	17	45
El Paso meals & tips (10).	23	30
El Paso washing & trunks	6	75
Alamogordo & return	27	00
Alamogordo pullman	4	00
Alamogordo hotel 3 days	15	75
Cloudcroft & return	8	00
Cloudcroft hotel 3 days	17	25
Cloudcroft baggage & tips	3	25
Horses 1 afternoon	3	50
Telegrams letters as per	4	50
Baggage on rail at Alamogordo	3	75
El Paso (2 days) hotel & meals	15	50
Tips and baggage	2	50
Things bought El Paso	6	00
Srolley, horses, etc.	4	00
	238	00

238.00  
168.20  
3 406.20

Pullman to Denning	4	00
Tips 1 meal & luggage	3	50
Denning Hotel Accomplan (5)	21	25
Trip to Silver City & back	15	75
Horses to Florida Outf.	7	00
Other expenses on trip	7	50
Trip to Aden and back	7	00
Total baggage Denning etc	1	75
Pullman to Tucson	4	00
Meal and tips	2	75
Tucson Hotel (3 days) <sup>late</sup>	15	00
Tucson meals (9)	15	00
Tucson expenses	4	50
Outfit & driver 2 day trip	28	00
Pullman to Oguna	5	00
Meals on train (2)	5	25
Oguna (2 days) Hotel meals	10	75
Oguna baggage & <u>laundry</u>	5	75
Pullman to Indio	3	00
Baggage and tips	1	50
	168	20



40620  
 22505  
 \$ 631.25

77

Indian bill 2 days	7	50
Pullman to Los Angeles	4	00
1 meal on train & tips	2	75
Los Angeles Total Bill	18	30
Los Angeles barber & hair	7	00
To Jim Baker	50	00
Calabria hotel bill	21	35
Meals taken outside	7	50
Baggage & Ticket over	5	00
Fishing expenses	12	75
Barman & club	4	00
Los Angeles 1 auto	8	00
Los Angeles meals (1st meal)	19	00
Los Angeles hotel bill	14	90
Los Angeles meals (2nd)	6	50
Drinks and tips		75
Ticket Las Vegas	21	50
Total Pullman	4	50
Hotel Las Vegas	4	00
Meals & Las Vegas	5	75
	225	05

\$715.80

Meals on way back fr. Las Vegas	2 50
Tips	50
1 sombrero 1 straw hat	5 00
Hat mending	1 50
Telegrams about	8 00
Stamps & postals bought	4 00
Fish mounting	21 50
Up. m. Love & other excursion	6 00
Return trip to San Francisco	20 50
Hotel bill	3 75
Washing	2 30
Watch mending	2 50
Tip for Kodak brought back	50
Meals back Los Angeles (16)	5 00
	<hr/> 84 55

63125

8455

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\$715.80

715 80  
 82 55  
 \$ 798.35

79

Hotel del Coronado	22 25
Horseback	3 00
2 meals out	2 50
Pullman to & fr S. Diego	2 00
Boat fishing 1/2	6 00
Medicines	4 85
Tips at hotel	3 25
fishing lines lost	1 50
watch crystal etc	1 50
washing Coronado	2 80
Los Angeles 2 days	4 00
meals (5) tips etc	5 00
Pullman to Enrico	1 50
2 meals on train & tips	2 20
1 turquoise stick pin	50
tuna mounted	6 00
washing Los Angeles	2 35
clothes pressed & cleaned	2 85
shooting gallery total	2 50
	<u>22 55</u>

photographs at S. Angeles

2.10





80000

40000

40000

\$ 10.60

85

645

Aug	22	pears	05
"	-	street cars	35
-	-	Tips 3 waiter 1 bell boy	70
-	-	champagne	75
-	-	Candy & paper	25
-	-	soda	15
23	-	Net-Samalfairs	90
-	-	lunch	90
-	-	postals & stamps	25
-	-	paper & candy	15
-	-	sodas	25
-	-	tips 2 waiter 1 bell boy	55
-	-	car fares	20
24	-	Berkeley fares	20
-	-	car fares 2	30
-	-	sodas 2	55
-	-	pop cone	20
-	-	tips by waiters	40
-	-	skating rink 2	90
-	-	seeing San Francisco	50
			<hr/> 10 60

Aug	24	slot machine	10
	-	newspaper	05
	25	candy	25
		street cars 2	40
		Auto. races 2	2 10
		tips	35





On the mesa outside of  
 Albuquerque I found only  
 a very few *D. viriculata*  
 but *Polanoplera* group  
 and that was all.

*Sitacutria* and all like.  
*Paraseneala* & also the  
 majority of *Mercuria* were  
 found in bunch grasses.  
 Others have *Solen* *Mercuria*  
 so plentiful as in this section  
 except perhaps in one small  
 bog in Florida. *Silvestria* &  
 all *Melanophora* were  
 found plentiful in high  
 boughs etc. *Euprotia* &  
 especially plentiful in dry  
 bare places in garden.  
*Leptocoma* common but in  
 dry woods always near  
 the ground. Only occasional  
*Archiloma* found. *Perla*  
*Longum* taken after long  
 search along irrigation ditch.  
*D. carolina* & *S. viridulata*  
 common - Red *Melanophora*  
 found on dry ground.

Navajo Co.

97 ~~Navajo Co.~~ Ariz. IX. 13. 1907

Alt. 4848 ft. *Callis* (occasional)  
 common in tall weeds about  
 water at orthoptera common  
 practically impossible to  
 find

100 Albuquerque N.M. IX. 14. 1907

Alt Specimens all taken in irrigated  
 tract where orthoptera was extremely  
 abundant and *Cynizetes* frequent.  
 The one *Spharagemon* taken was  
 caught with the greatest difficulty.  
 The species was *intraventricularis*  
 very and in the mosquito infested  
 district it was a severe trial  
 to spend so much time on a  
 single specimen. *Aulicora* loc.  
 were taken in field of short grass  
 See 97 —

See 48 for lower altitudes



18 Alt. 6748 ft. IX. 13. 1907

Williams Arizona. All specimens  
taken in same place. mostly  
evergreen with rabbit weed  
and other squally low  
green herbs - a country  
of many glades where  
all the ground is green  
and the scattered trees  
everywhere produce a  
park-like effect. (But  
one squirrel seen - in  
the 2nd place)  
small West. Wren  
2 Carolina  
dark longwinged Warblers  
all singing " " "  
all there only two or three  
white-throats. As it  
was not yet 7 a.m. the  
insects were all still  
sluggish & easy to capture

Hawaii

97 Sept 12. 07.

Plateau in Cañon of Oloke  
near Bright Light Trail Ave  
from 3000 ft to 3700 ft.

The *Parapomala* ~~lance~~  
taken in grasses in juniper  
of lower Cañon of River at 2700 ft.

In plateau covered & with  
~~scattered~~ dotting of a  
dry desert shrub *Ad.*

Probably there are no other  
reservoirs to be found ex-  
*hemiculata* - In garden

in garden garden over  
found 1 *D. carolina* &  
1 *tebbioid* further in *D.*

Among all the wing *D.* taken

The Syrphula were extremely  
 active - The males instead  
 of flying straight from  
 one flower to another  
 were usually swooping  
 on a wide curve which  
 took of size and coloring  
 of males, some very pale  
 to follow - I noticed  
 almost nothing on the  
 powerful Aethalia, and a few  
 Blue wing Tenebrionids  
 about, some here but  
 not much about  
 I saw a few small  
 minute flies, some in  
 the long wings, few  
 small ones at all but  
 was a very few  
 purple. I saw them taken  
 from rabbit like ones



Small *Melanocephala* are very  
swift jumpers but easily taken  
as they were plentiful. I  
collected only found in  
open especially near habitations.  
One *A. minutus* found on ground  
covered with needles only in  
Piñon and juniper forest.

96

Swart night trail, Grand Cañon of  
Colorado, Arizona IX-12. Alt 4850-5000

Specimens taken on almost  
vertical hillside covered  
with low bushes and a few  
clumps of grasses - also a  
scattered growth of Piñon  
and Junipers. *Melanocephala*  
traced from <sup>highest</sup> especially  
about the junipers &  
the Piñon. Both on the ground  
the bushes and the Piñon.  
The *Melanocephala* of the junipers.



along upper precipitous  
 ledges - Nowhere plentiful.  
 One small *maculata* like  
 species taken among forest  
 of Pinus & junipers - another  
 taken among weeds near  
 R.R. water. *Melanophaga*  
*sp.* taken on open field -  
 overgrown w. rabbit-like weed.  
*Hecaethus* taken at night  
 on rabbit-like weed - Heard  
 plentifully - *Leucotis* makes  
 a very loud clatter much  
 resembling the sound of  
 a circular saw - It seems  
 to be quite unable to fly  
 without clattering. In the  
 afternoon I found it to not  
 be on the wing at all.  
 Blue wing *Trochotrogon* makes  
 a clatter like *L. verreauxi*  
 at will - *Leucotis* in flight

*Aerotruncus* common on the ground. A few *Hesperotettix* and *melanoplus phyllifolius* in the weed. Only about 30 min collecting 95

Grand Cañon Arizona IX. 11. 07 alt <sup>7000</sup> ~~6000~~  
*Cricotettix* not uncommon in openings among yellow pine. Other places it was very scarce. Heavy *melanoplus* among scrub grass and sedges in yellow pine forest. Small *melanoplus* common almost everywhere. Low vegetation was but not plentiful in weed like Rabbit weed. Two short winged *Aulocara* (?) found on stony ground among low plants in forest of various *Juniperus* where there was practically no *Orthoptera*. Blue winged *Truxocentropus* found along break of cañon and about

found in small numbers <sup>w</sup> here

♀ *Stagnomantis* taken from ground  
 One *Leptocryptus* taken from  
 mesquite where it was actively  
 climbing & jumping about.  
 One yellow wing *Stenobothrus*  
 Only one specimen seen.  
 One *Leptocryptus* taken at  
 dusk from foot of mesquite  
 mound roots and dry leaves.  
 I detected the locust by  
 its incessant cricket-like  
 but shriller zee-zee-zee  
 later I heard crickets  
 but so wary were they  
 and so difficult to  
 detect that it was simply  
 impossible to capture more.

94

Amala Arizona 6850 H. A. T. Co

IX. 11.07. Specimens taken in field  
 of something like rabbit weed -



were found on greasewood  
 but only with constant  
 and long search. The  
 insects flew from one  
 greasewood to another when  
 alarmed but were easily  
 approached and captured.  
 Red & Ceryleid beater from  
 bush while ♂ of same found  
 on top of low white desert  
 bush from which it was  
 easily picked. This one was  
 protected by protective coloration.  
 Probably other adapted one.  
 2 Blue wing Junco. Taken  
 they were very scarce. Only  
 2 seen in all afternoon on  
 Quercus. fairly plentiful  
 in low white desert bush but  
 hard to capture as they are  
 as at Casa (Spec 69) very swift  
 and alert. They are not



unicatères in great numbers  
 but very few *Imatres* - But  
 one *Ellipes* was taken tho'  
 the place was thoroughly beaten  
 over. *Parapomala* like very plentiful  
 Only one *Eucrotophus* seen  
*Draco* had a decidedly yellow  
 cast when flying. *Myiobezus*  
 and *Immatris* taken near  
 wet spot on sand. *Luc*  
*Las Vegas* *Opeia* seen sure -

93

Cottonwood Sta. San Bernardino Co.  
 Cal. IX. 9. Alt. 2274 ft. On greasewood  
 found *Boottellia* and *Squirrellia*  
 common as usual and both  
 stridulating frequently. The  
 stridulation of *Boottellia* and  
 its less harsh notes distinguish  
 it easily from *Squirrellia*.  
 Besides these a few *Hemiphaedusa*

but often displayed very  
similar action to *Drosophila*.  
I have never seen *Orthocentrus*  
thicker than the *Melanogaster*  
among the tar weed. I  
was unable to collect  
specimens as soon as  
the thistle I would  
necessarily lose them. I  
the numbers of *Melanogaster*.

91 Taken <sup>GM-1274</sup> on train stoping at Cottonwood  
Sta. San Bernardino Co. Cal IX. 9. 1907  
In middle of pure desert country  
*Hemiteles* very active. They have  
a habit of switching away the  
instant they alight (nam. fr. Baxter).

92

W. H. H.

Cottonwood Sta. San Bernardino  
Co. Cal IX. 9. Specimens taken beside  
dry river - very little water in it and only  
20 yards. The dry grass, ground  
and very damp. I found *Sellingia*.

two feet high Melanopli  
simply swarmed. Dactyids  
 were very common on  
 the ground live and  
 among the stubble —  
 the dactyids were usually  
 easily captured but some  
 individuals proved very  
 active jumping rapidly  
 about with leaps of  
 several feet. They  
 stayed almost invariably  
 on the ground — Distortion  
 displayed the same  
 swimming flight which  
 I first noticed in the  
 same place at Salt Lake  
 They had to be cautiously  
 approached but with great  
 jumps were usual.  
 Some with one — one — one  
 was once very taken.



Summit House Madera Co. Cal. IV. 3. 07

Alt 2200 ft. Specimens taken on hillside covered with a matting growth of oaks and ground. Thickly overgrown with short dry yellow grasses and a very scant scattering of very low tar weed. The *utricula* was scarce and extremely active - *Spharagnum* was common. Only two of the *Dactyloids* found on the ground both -

90

Raymond Madera Co. Cal. IV. 3. 07  
Alt. 940 ft. In open field of stubble. *S. longum* very common. *Disostoma* *affinis* common, somewhat scarce a very few *utricula* and many *Spharagnum* - in the heavy tar weed about

Note  
*utricula*  
very strong  
the velvet black ant  
*utricula* covered with  
and the *utricula*  
speckled back  
all specimens of  
one of the



and not any broader than that species. So faint was the sound that I felt confident an *Oreoloma* was in the low pines where I found it - Specimens were marked up in large trees on their trunks and all about the pine saplings at Honomal.

87

Miami Mariposa Co. Cal IX. 3  
Elevation 4200 ft. Specimens taken on hillside in coniferous forest

88.

Alwahnee Madera Co. Cal IX. 3  
alt 3700 ft. Specimens taken in a small grove of tall wood four feet or more high. *Myrmecophila* very common there only.

all along the road these Arctic  
Innuits were swarming in the  
conifer forest.

Sutro's Yosemite Park alt 4000. IX -  
all diff like Melanophyes taken in  
one spot of green grass & ferns  
nowhere else was the species  
to be found. The Xiphidion  
today were very numerous as  
it was clear and kept up a  
constant faint green glow.

Mendocino Co.  
 Wauson California U.S. forest reserve  
 IX. 1. 07. *Cucullaria* taken among  
 conifers - *Corymbus* near Lake  
 in underbrush - *Scilla* & *Stellaria*  
 in *Mentzelia* *Dracopis* *Scilla* *Stellaria*  
 IX. 2. 07 taken  
 in bare places under *Quercus*  
*Stellaria* of *Atlantia* in *Stellaria*  
 to be a faint zig-zig pattern  
 zig-zig pattern much like *Stellaria*

alt. 5000 ft =

82. Specimens taken at Eight Mile Camp  
Yosemite Nat. Park IX. 1. All were  
taken in forest of conifers where  
ground was covered with low  
sage-scented plants.

83

alt. about 6000

Trouse Creek, Yosemite Nat Park  
IX. 1. Taken on hillsides covered  
with tall conifer forest. Large  
species were very plentiful  
in open spaces covered with  
mostly pine needles. *Crotalus*  
was the most active & they  
were generally silent -  
The "growing" *Tamias* was  
common and makes a lot  
of noise. *Sciurus* - of  
all species like found on  
steep hillsides among a  
very few low green plants  
buried about ~~very~~ actually  
but for only short distances



high fir trees at 11500 —

All large clattering *Cercotettix*  
taken on bare slopes of  
almost precipitous glacial  
rock where they kept up <sup>in the</sup>  
a constant loud and vigorous  
clattering. The species was  
found in this sort of place  
only but was plentiful  
in the most dangerous  
locations — Owing to its  
vigorous flight and the  
character of its surround-  
ings it was a difficult sp. to capture  
alt 4800 ft. —

All other  
*Cercotettix* except (2) taken  
at Inspiration Point at  
an elevation <sup>also blue leg mule deer</sup> of about 5400 ft. in  
an open sunny piece of  
ground — *Cercotettix*  
taken at 4000 marked 4000  
all these places &



and in both mentioned localities.  
*Xiphidione* was common - In  
 meadow of herbs (no 80) I found  
 a short winged *metanoplos*  
 in a restricted locality and  
 almost everywhere small  
*Coryza*. - Near woods under  
 Mangrove dark mountain *Tricentropus*.  
 One *Sphoragemon* *venustus* and  
 a strange gray *Metanoplos* taken  
 in shadow of herbs (80) - It was  
 a rainy day Temp. 82° and  
 all *Tricentropus* was very sluggish.

81

Mangrove Valley Alt 4000 IX. 1. 07  
 Two *Crocotellus* and 4 others <sup>esp. are *Coryza*</sup>  
 seen on sandy spit  
 in pine forest. Two  
 large *Stratiotes* like  
 of *Spizella* *indica* in  
 bushes on the bank of

Taken at 2050 on <sup>dry</sup> mountain  
among dry leaves under  
Mangrove and other bushes.  
It was taken at daybreak  
and careful search had  
to find out other collections.  
Other two *Trimerod. Spharagmus*  
taken beside Merced River  
in grassy spot. One of  
long winged *Spharagmus* taken  
at head of Yosemite Valley  
in sandy spot on same  
date from this number.

80

alt 4000 ft.

Sentinel Yosemite Nat. Park. VIII. 2. 1907. In  
meadow of deep rank grass near bank  
of Merced river on this slope of  
*Spharagmus* were found in plenty  
as well as *Trimerod.* in all grass. But  
they were taken with difficulty. In  
meadow on other side of river  
common *Spharagmus* were found.

cease stridulating but  
 kept up a loud constant  
 tick tick tick tick  
 much like our eastern T.  
 but far louder.  
 I heard other individuals  
 still stridulating loudly  
 just before dawn.  
 I located one specimen  
 in a high oak tree,  
 another about twelve  
 ft. fr ground in dense  
 bush, another in tangle  
 of vines near the ground.  
 The one I took on a  
 low green bush and  
 others in bushes on the  
 mountain side. Oriskany  
 Decatur & this all taken  
 by and of lantern. 75  
 I collected one strange  
 short winged Melanophila



shrubs. As on Mt Lowe this species flew about for short distances usually alighting on the tops of the bushes where all other allied species almost invariably alighted on the ground. No arthropods or birds were seen. The much ground was covered of exactly the right character.

Alt. 17345

78. Mixed California specimens taken field of very dry yellow soil like yours - *Myelophanes* very common - Large *Myelophanes* only specimen seen at night.

VIII.30.1907.

79 El Portal <sup>Alt 3200</sup> near Yosemite. VIII.30. *Myelophanes* taken at night. The habitat is exactly the same as the other. Even when approached it did not



were often found near  
the base of the bush. The  
species is common but so  
small and powerful that  
it is quite difficult to collect.

77

mt Samalipas Marin Co. Cal. VIII. 23

Alt- 1500 ft. Specimens taken  
among low mountain shrubbery.  
Eumartid common but not  
as plentiful as at higher  
elevation on bush No 3 and  
bush w. red peeling bark.  
Bush No 3 not as plentiful  
as higher also - 70 reddish  
found on bush w red bark  
of exactly same color.

Very queerly colored mounds  
found on ground among  
shrubbery bushes not  
20 feet from a little creek.  
The conozoa (??) found now.

ground covered with leaves  
 and the bark of a certain  
 tree which they much resembled.  
 They were very quiet and even  
 found could be picked up easily.  
 The heavy *Callaenophis* was  
 found about track & light  
*Callaenophis* is all *Trachylepis*  
 among bush. (2) *Trachylepis*  
 were found on piles  
 of earth thrown up by *R. l.*  
*Callaenophis* among mountain  
 bushes in loose soil. *Trachylepis*  
 found quite plentiful on *Callaenophis*  
 bushes where it was found to  
 prefer almost entirely *Callaenophis*.  
 On this it was observed  
 always found and jumped  
 deliberately but with great  
 power from one point of  
 the bush to another.  
 The *Callaenophis* & *Trachylepis*

14

Marin Co. alt 300 about

Mill Valley California VIII. 23 In dry grass  
hillside - *Spharagnum* plentiful  
where grass was present - *Camilla*  
*Camilla* not common. *Xiphidion*  
taken in dry ditch - *Melampyrum*  
very common - Species which  
very young *Eucyrtolophus* was common

75

alt 2500 (592) Marin Co. Cal. VIII. 23

Summit Mt. San Geronimo  
in low bushy mountain vegetation  
*Tricentropis* on bare rocks -  
bushes - Along to summit of  
mountain - summit of mountain  
not yet collecting waste to be made

Mt. San Geronimo Marin Co. Cal. VIII. 23  
alt 2100. In stream coming  
from mountain side under  
various tall trees where some  
large grasses grow. *Sphaer-*  
*trichia* were found on



and few *Poliochaeta* from dry grass  
at South Sea Ridge where the  
species occurred.

72

Sea Grass Mexican Line Cal.  
VIII.16 Leprous on rocky hillside  
overgrown with absolutely dried  
bushes - *Cerplia*-like & *Bolonia*  
in same place. *Melanopti*  
in Sea Grass river bottom in  
high green woods. *Comozoa*  
in same locality. *Merobius*  
in grass near bottom in  
dry grass - (1 *Mytilus* taken  
Cromado Beach Aug. 15<sup>th</sup>)

U.S. Navy VIII.20 Specimens taken  
in rocky grass fields. *Alantia*  
common in dry grass. *Alantia*  
irregularly distributed. *Spizella*  
common in dry grass.

Coronado Beach Cal. VIII. 15 All taken  
in weed and dry grass field  
near shore except *Ammodramus*  
taken at the foot of *Yucca*  
in hotel yard and *Trimerotropis*  
taken on sand near shore  
among beach plants - Note  
strange marking of the  
underwings of the specimen  
71

South Coronado Beach Cal. VIII. 16 -  
♂ *Trimerotropis* taken in beach  
vegetation among sand dunes  
All *Asphondylia* taken in low  
salt marsh plants along edge  
of marshy spot. All *Lyphidion*  
taken in marshy spot on  
marsh plants. The fly  
a pale color in beautiful  
dark deep green - *Melampus*  
taken in beds at S. San Diego

never left its burrow but  
 and in the deepest parts  
 and was very difficult  
 to secure. There are two  
 color forms of *Signatella* of  
 these I found one almost  
 wholly on the plains and  
 the other on the foothills.  
 The plain form is generally  
 blackish with gray mottlings.  
 Back of wings ~~black~~ gray with  
 black speckles, back of  
 pronotum buff w. black  
 specks, white spot on sides  
 of pronotum toward thorax.  
 Legs almost white w. black  
 bands. Mountain form  
 nearly a uniform cloudy  
 buff gray streaked w. darker.  
 Heavy *amblyopis* found  
 among low bushes near  
 railroad a few *amblyopis*



65 In Nevada ~~1~~<sup>1 1/2</sup> mile from  
 Lyons station in California  
 Same character of country  
69 precisely

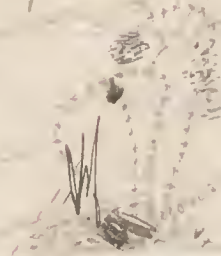
China California Alt. 4192 VIII-12-07  
 A high plateau covered with high  
 tree yuccas - the low vegetation  
 was ~~some~~<sup>very little</sup> greasewood and ~~some~~  
 different species of desert shrubs.  
 Along the track in timberland  
 I found the *Eurocarpius* like up  
 and *Cordillacrus* - The latter  
 very scarce. In the hills  
 I found *mesquites* etc. in  
 the forest bushes - In  
 the place among the timber  
 and "brushways" *Juniperus*  
 species were found with the  
 same. In the by bushes *Arctostaphylos*  
 & *Leguminosae* - *Arctostaphylos*  
 in the ~~thicket~~ of the same

# Map showing Lynx & Bird-spring Mts.



McCullough Range NEVADA CALIFORNIA at 8100 to 9000

Bird Spring Mountain at 5000



Basin & Plateau

Mountain & sand

dry lake bed

containing ice  
and small stones

containing (ice?)

the air. Their wings looked  
in the most cases a  
~~shame~~ dull ~~dark~~ but  
translucent blue.  
Alt of Lepus (3000 ft.)  
Alt of Katydid and  
other found cases at  
(2550 ft) Alt of heaver  
etc (2900 ft)

67

Alt Lyons

Across the line from 66 in California  
Lyons (Station) - The strang desert  
species was only found in the  
deep sand covered by scattering  
dry grass near the station.  
In other similar localities  
none were found. but here it  
was plentiful. - Derotermes  
along arroyos. Helix, heavy  
grasshopper all taken at foot  
of Clark Spring Mtn. Vol. 1  
Range California

D. H. C. 1887



*Dactynotus* in small desert  
 bushes in arroyos. Parapomala  
 in strange patch of deep  
 sand with only growth  
 clumps of high dry grasses.  
 I flushed the *Hatydid* from  
 a greasewood, and it flew  
 over the prairie much like  
 a *Schistocerca* alighting  
 on the top of another  
 greasewood, at least  
 two hundred yards away.  
 The heaviest grasshoppers  
 flew similarly and for  
 quite long distances  
 alighting on the bare  
 volcanic fragments  
 and climbing at once  
 upon one of the larger  
 stones. With caution  
 they were easily approached  
 and captured. In

65.

Alt 2000

Las Vegas Nevada VIII. 10 Collected  
 along down stream from town  
 the plain of brush and desert  
 plants found new to me *Trimerotropis*  
*Trimerotropis melanoptera* group  
 specimen taken on sandy  
 growing in bushes  
*Lycoperotettix plantifolius* on  
 low thorny bushes -

66 -

~~alt~~

(Nevada)

Foot hills of the Bend Range <sup>Nevada</sup> Mts -  
 the McCollough range VIII. 11<sup>th</sup>  
 ground covered with volcanic  
 fragments. *Larva* there  
 being largest, *Heliothis*, *Homoptera*  
 were taken was only scattered  
 greasewood. Large *Psatydia*  
*Lycoperotettix* *Borlettia* are  
 present with only *Psatydia*  
 before taken in where  
 where *Psatydia* *Psatydia*

63

Las Vegas Nevada VIII. 9 *Homogamia*  
at light in barber shop flying  
about. *Myllus* in crack in  
side of building. *Urocyllus*  
in pile of ore where a colony  
of same was chirping incessantly

Alt 2118 ft.

Kilauea California VIII. 12. Specimens  
taken on extreme desert plain  
only growth scattered greasewood  
and a very few low desert  
plants. *Liquidilix* plentiful  
on greasewood as usual. Largest  
hopper across plain on volcanic  
soil. *Urocyllus* found on  
desert plant and adjoining soil.  
Kilauea is situated some seven  
miles from the country  
sand hills called the Earl's  
playground and near it  
a dry soda lake.



blue wing

Alt. 2200 Summit 2300

62 North Range Providence Mts Cal.

VIII. 12. Specimens taken on plain covered with scattered <sup>bush</sup> vegetation - Greasewood and a desert bush - 7 *Stizomant* taken in green desert weeds - Heavy largest hopper found on volcanic rocks (plain was made up of these and a very little sand) Most of the *Derotimema* found resting on desert weeds - *Sigurotilla* and *Boottia* all in greasewood. Blue wing <sup>*Trinicrotopis*</sup> ~~*aphaenopus*~~ on volcanic foothills of bare black rock with hardly any vegetation One *Melanoplus sanguinarius*? seen but not taken on low desert bush Diligent search for an hour in the vicinity failed in finding others

Note - The small miniature grasshopper taken at Arden w. strange long antennae was beaten from a low dry desert bush -

found in dry places close to stream. *Melanoplus* in high weeds near stream. Both *Alpheia* & *Parafornax* stridulate faintly.

61

Oct. 2050 Aug 10th

Las Vegas Nev. VIII. 19. 07 Specimens taken in watered strip beside stream. All *Stenotarsa* found in one clump of very green weeds. *Meloboris* & *Leptogids* found in grass beside stream rather well distributed. *Orphulella* in same location. *Acrolopus* found beside stream but in swarms out among the low desert plants -- In the desert away from the stream practically nothing was to be found -- a lime flat.

at 2250 Aug 10<sup>th</sup>  
 60- Las Vegas Nevada VIII. 19.07

Specimens taken in desert  
 lands on both sides of  
 stream - no greasewood  
 hardly any mesquite All  
 low desert plants such as  
 rabbit wood etc. *Alpina* found  
 in newest growth of plants  
 where grasses were to be found  
*Paraponera* in same  
 location but more near  
 grass. *Sigurotella* heard  
 in one small colony  
 in a thicket of a low  
 spined desert bush -  
 They did not make as  
 loud a noise or as prolonged  
 as *Knuzei* at Yucou  
 Small like *derotumma*  
 w. both red and transparent  
 wings found in bare  
 desert places - *Weslobryna*



VIII. 8

57. 2700-3500 ft Echo Mt. Mount Juniper  
 Dark Juniperotropis taken at Echo  
 Mt station 3500 among ruins of  
 burned house - *Quercus* There also  
 ♂ *Dracopis* taken on loose rocks  
 of very steep Mountain ~~the~~ slope  
 a *Silene* species protected very  
 much by vegetation - Many *Lepus*  
 at about 3100 ft. One *Eumastix*  
 on bushes at 3200 ft. Small  
*Lepus* common on hill-side.

58

Taken between Rubio & Altadena  
 Bright *Juniperotropis* taken in dry  
 brush & grass. VIII. 8, 1907 Alt  
 1100-1600 ft. *Schistocerca* taken  
 in bushes.

59 Rubio Cañon Alt 2200-3000 ft  
 VIII. 8 - Specimens taken by  
 Bailey -

*Silamutria beata* from bush  
 & *Arphia* taken on steep  
 mountain side at 4700  
 ft. *Melanopli* found in  
 bushes on steep mountain  
 side. All others at 4300  
 in grasses among bushes.  
*Euphilotus* very shy  
 and a swift but not  
 long flight. When pursued  
 too closely they hid in the  
 grasses & were very difficult  
 to find. *Chroatter* like lives  
 in places where insect does  
 not fly but leaps and crawls  
 about actively. The males  
 stridulate loudly like  
*Orthippus arizonae* but much  
 louder. ♂ *Euphilotus*  
 makes a low & running  
 vibration.

The smaller *Cruciatella*  
 some *Cruciatella* *diffusa*  
 made for *diffusa* but  
 a *diffusa* *diffusa* *diffusa*  
 and *diffusa* *diffusa* *diffusa*  
 in some place some place  
 and about *diffusa*  
 they often sit in the top  
 of a bush where *diffusa*  
*diffusa* taken in some  
 place and also in some  
 after in the *diffusa* bottom  
 in some place

*diffusa* VIII. 8. 9th Slope  
 in some place

*diffusa* 4500 1000 *diffusa*  
 Place almost all were *diffusa*  
 1000 4300 elevation. *diffusa*  
*diffusa* *diffusa* at foot  
 of bush and some





abundant in all dry and  
silly localities. *Amphispiza*  
taken on hillside beside  
a dense tangle of low  
bushes - The species was  
extremely active & inconspicuous.  
Collecting in almost all  
places, very hard work.

52

*Catalpa* *Catalpa* *sp.* VIII-3  
Specimens taken in dry places  
among rocks and desert  
bushes in canyon. *sp.*

Blue wing *Melospiza* very  
scarce. *Lepus* *uncommon*

53 *Catalpa* *is* *monocarpus*  
1000-2000 ft. Taken in  
open places on ridge  
of quartz. Much *uncommon* at  
1500 ft. in low bushes.

common. *Prodoessa* scarce  
in dry grass on top of mesa.

No. 49. NOTE!

Pasadena Cal. VIII. 1 Taken  
(arroyo seco)  
in arroyo cañon in heavy  
brush and cactus and  
beside stream bank -

One heavy, sh. winged Ind.  
Beautiful bl. winged Cicada  
quite plentiful. 3 strange  
L. *Amurotopis* taken.

*Leptocryptus* common  
in dry spots and in  
the shade of garden  
*Mesoleptus* all in dry  
gardens. 1 *Dactylops*  
taken from bushes.

51

San Rafael  
Specimens taken in the  
fortalls of ~~San Rafael~~  
*Ophegaster* fairly



49 <sup>mid</sup> / 50 <sup>int</sup> / 51 <sup>3rd</sup>

49. Margarita for Buzak. Cal  
VIII.3! Taken near shore along  
border of field of dry  
stampled grasses near  
tall dry weeds. Sphagnum  
very active and dense  
flying for some distance.  
with the gluing precipitation.  
Only one blue wing. Simulid  
seen. Simulid The next common  
Kobold. Not common and  
more active than seen. The  
other species of Simulid

49. No. 50 NOTE!

Coahuila Cal. VIII.1 Specimens  
Taken on steep sides of <sup>San Rafael</sup> ~~mountain~~  
among shrubs and dry grasses  
in a very rocky location.  
Lepidoptera was very scarce.  
Only one blue wing. Simulid  
seen - See red wing Simulid

21e Birds <sup>col.</sup> Specimens Taken  
 on dry plain of very  
 high weeds. *Spizella*  
*chrysola* but was very scarce  
*Geothlypis* <sup>in dry woods</sup> common — In  
 irrigated alfalfa field  
*Schistocerca gregaria* and  
*Spizella* were common  
*S. gregaria* was very plentiful  
 also in tall weeds along  
 a watercourse VIII. 29

47

Alvarado Bay, Los Angeles Co.  
 Cal. VII. 31 Specimens Taken  
 among sand dunes on  
 a small island.  
 somewhat scanty in places  
 The *Myiarchus cinerascens* was  
 very abundant  
 among the Xiphi taken in  
 wet spots among dunes

June VII. 27. At night  
 The swarms of *Homocidus*  
 was very common — as in  
 all other cases the same  
*Homocidus* taken was found  
 near a small electric light

43

June VIII. 28. Specimens taken  
 in acid wilderness of tall dry  
 woods along Lila River —  
 that in Lila River spots was  
 everything to be found.

Hof

June VIII. 28. Taken in Lila River  
 grass growing in irrigated  
 district. Below the town on the  
 Colorado river —

45

June VIII. 28. At night  
 The swarms of *Homocidus* were  
 very common



scattered growth of low  
desert plants. VII. 27

41

ca

14

14

14

14

14

14

14

14

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14

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14

Quercus Arizonae VII. 27. 1907

Specimens taken along  
river bank in high north  
of desert vegetation.

Opuntia missouriensis common on  
dry banks of river bed.

Red oaks. Acroplex  
in woods. In sand.

Plants covered with green  
Lycopodium was extremely  
abundant while Lycopodium

was not common on  
the uppermost sprays of  
Pinus ponderosa. Probably on

acc. of the fact Lycopodium  
was extremely abundant and  
dry. Quercus was common

and Pinus ponderosa was not.

Pinus ponderosa was not.

approach and when  
 observed flying for some  
 considerable distance. - I  
 noticed that when pursued  
 it preferred alighting on  
 the ground, rather than in  
 weeds and bushes. The  
 first I found it, first  
 among heavy vegetation

26.

White-winged Nighthawk, light  
 beside water. <sup>W. C. C.</sup>  
 Santa Cruz, <sup>W. C. C.</sup>  
 common in large spots

27.

White-winged Nighthawk, common  
 in light in State of Texas

40.

Santa Cruz, Sta. Cruz Co. Mexico  
 specimens taken in  
 Santa Cruz with a

The Stigids were taken  
 on the border of a pool.  
 The crab and the *Arconia*  
*Scaphus* were taken in a weed,  
 growing along margin of the  
 pond. *Scaphus* *Scaphus* were  
 found common in acid  
 ground near the water.  
 Cucumbers were taken from  
 garden weed and also  
 a few common in a  
 irrigated field. A few  
 taken from a bush near  
 pond in the flat in  
 dry field occupation.  
 Others caught in a  
 small garden about  
 the pond at night.  
 A few taken in a  
~~pond~~ pond near the  
 pond in the field.



Two *Myzostella* among rocks  
36

VII. 25. 07.  
Savanna Road 12 miles  
from Tucson, Ariz. In  
Savanna flat where many  
grasslands grow from  
there by diligent search  
quite a few *Myzostella*  
were taken and one  
of *Myzostella* from top  
of a grassland.

37

Tucson Arizona grassland taken  
VII. 26 in southern Arizona  
in a dense grassland at  
which was stagnant water  
around the water a *Myzostella*  
grassland grassland grassland  
at the *Myzostella* *Myzostella*  
and caught by *Myzostella*  
*Myzostella* *Myzostella*

about the water. *Podiceps*  
and *Arcturaea* were very  
abundant. A few *Myz.*  
were taken on ~~the water~~  
~~rocks~~ - chiefly ~~the water~~  
*Helicetus* was very abundant  
under the water.

35

VII 25 37

3. In a rough wheel *Scop.*  
to point to the water. *Scop.*  
a rocky place covered  
with *Scop.* and *Scop.*  
*Scop.* *Scop.* *Scop.*  
then on rocky *Scop.*  
which were *Scop.* *Scop.*  
under the *Scop.* *Scop.*  
between the *Scop.* *Scop.*  
up *Scop.* *Scop.* *Scop.*  
*Scop.* on *Scop.* *Scop.*  
*Scop.* very plentiful in  
the *Scop.* *Scop.*

34 *Platanus* *altissima*  
 35 *Senecio* *altissima*  
 36 *Senecio* *altissima*  
 37 *Senecio* *altissima*  
 38 *Senecio* *altissima*  
 39 *Senecio* *altissima*  
 40 *Senecio* *altissima*

Only a very few mesquite  
 were up the larger vegetation  
 the *Perotomus* were very  
 plentiful while *Lepidodermis*  
 was not scarce - Only  
 a few *Conyza* were seen  
 and *Lactuca* was also not  
 plentiful. But one *Erigeron*  
 and *Hesperis* were seen &  
 only a few *Senecio*  
 up the road. The *Senecio*  
 was extremely plentiful  
 and the *Senecio* were also  
 plentiful.

34 *Senecio* *altissima*  
 35 *Senecio* *altissima*  
 36 *Senecio* *altissima*  
 37 *Senecio* *altissima*  
 38 *Senecio* *altissima*  
 39 *Senecio* *altissima*  
 40 *Senecio* *altissima*



in colonies of some 200  
among the rabbit wood,  
the snakes were exceptionally  
active and so small that  
they were followed with difficulty.  
*Dendrocineta* was common  
on the frequent washes.  
and also *S. punctulata*.  
Very few mature *Hesperotettix*  
were seen in the adult  
*Heligaster* was very scarce  
and only found on the  
washes!

Specimens taken near the  
Savannah and half way between  
the Septa and the Savannah after  
7:30. The locality was  
in the marshy area  
between the Savannah and the  
Savannah and the Savannah

VII 24

32 VII 24 Specimens taken on  
 plain of rabbitweed & mesquite  
 at Rock's Ranch miles from  
 foot of Baboquivari mts  
 on plain between them and  
 the Tucson mountains -  
 Muzai was found on  
 bushes of mesquite and  
 other varieties where they  
 clung tightly to the twigs  
 and treated as far to their  
 protective coloration that  
 those taken were cautiously  
 approached with the hands  
 and suddenly seized - If  
 not captured they sprang  
 with agility to some other  
 part of the bush. They  
 vibrated frequently a  
 faint silk like sound.  
 The specimen was found

near occuring found in  
 clumps of grass from  
 which I found the adults  
 almost impossible to beat  
 as they cling so tightly  
 to the blades but they  
 were easily scared up  
 and taken. All others  
 about same as along track

29

Evening N. M. VII. 20 at night  
 at light caught by holding.  
 Caught viduors.

30 Tucson, Pima Co., Ariz  
 VII. 23.07. At light in  
 city.

31. Specimens taken among  
 cacti on plain at foot  
 of west side of the Tucson  
 mountains. VII. 34



Beetles were taken on the  
low grasses.

28

June 21. M. 21 On grassy  
rolling prairie with an  
extremely scanty and widely  
scattered growth of very low  
sagebrush and a few sedges.  
Hippocampus was found to be  
~~very~~ scarce and extremely  
easy. Some took many minutes  
of continuous pursuit to  
capture. One *Pyrochroa*  
only taken on bare red  
earth between grass spots.  
*Amblyderus* found fairly.  
Numerous in a few spots.  
*Cordillaria* and *Bobasat*  
plentiful in all fairly  
well grassed places.  
*Paraphanocera* and its

*Deroceras* was very abundant on cinders along the track and inactive till the sun warmed the ground when the species became very active. Only a few *Akrotus* were found in this situation.

The few small snails taken included *Gerrhon* very closely in their action. The small reddish sp. w. heavy pumping legs was only occasionally found and was a very powerful and speedy jumper when active.

For the most part no *Helix* were found. *Truncatella* was scarce and but one specimen of the other a distinct species was seen. *Truncatella* (var. group) was seen but not taken - *Truncatella*

*Megascops & Dryobates* Taken under  
 about 400 ft above plains  
 everywhere on the hill. *Polioptila*  
 was to be found but in very  
 much fewer nos. than on the  
 plains. *Hesperotettix*, and  
 several walking sticks were  
 taken on the (*Hesperotettix* used).

27

Specimens taken between 5 and 8 AM  
 in grass beside the R.R.  
 Oct 21. M. 1897. Cool 2. m -  
 the *Micropterus* was an extremely  
 very and alert species flying  
 swiftly for a short distance but  
 so erratically that it was almost  
 impossible to follow. Almost  
 a dozen specimens were seen.  
 The *Polioptila* were very abundant  
 and the *Amphispiza* were the  
 most active and the most plentiful.



taken in short grasses  
of hillside where Cordillarias  
was found most plentifully.  
I saw one *S. melanoptera*  
about five miles south  
of Silver City on the R. R.  
-6-

Aden New Mexico July 21, 1897 An  
very rocky hill about 2000  
above the surrounding plain  
from which it rises steeply  
with ~~on the~~ <sup>on the</sup> hills near  
them almost a mile -

On the upper part of this hill  
~~quite~~ a few *Arctia* were  
seen but only one was

seen owing to the difficulty  
in collecting here and the  
rarity of the species.  
*Arctia* was plentiful in  
the same place but about  
the same time -

VII. 19. 07.

23 Darning Taken at night about town lights. All *Homocidus* taken on rough walls or screens on which the light shone except one which was flying about a light similarly to a Noctuid but not so erratically -

*Tryblus* very powerful flies

24 Darning at light VII. 20. 07  
*Homocidus* flew into station and settled near light  
Noted to be a very swift flyer -

25 Silver City N.M. VII. 20.

Specimens taken on very rugged hills on which vegetation was by no means plentiful. *Ischnura* was found quite plentiful in certain small spots. The single *Butor* was

several crinoids from the mts.  
Two *Aspleura* seen at  
about 5100 to 5200 ft in  
dense oak etc scrub just  
below bare rocks. One  
small green insect walking  
stick & some very mature  
tadpoles. The small green  
fell from an oak shrub.

At 1500 the stone was taken  
from same place (See 17) it  
was <sup>proportionally</sup> more at 5100 as  
*Hesperotettix*.

22 During tadpoles about twice  
at night. *Homogamia* taken  
sitting on black wall  
near ordinary electric light  
Everyone says that child  
of the earth is found  
everywhere and there in  
this section.



Short winged melanoplus  
 found in very few numbers  
 among oaks (burkholley) but  
 a number of immatures  
 of probably the same species  
 seen. *Mercuria* = one  
 mature male seen. *Setigera*  
 found ~~in~~ plentiful in  
 very small area of wet  
 ground in canyon just  
 below a spring at about  
 5100 ft. *Tricentropis* like  
*ovulata* but darker taken  
 same place as *Ophelotrogus*.  
*Hesperotettix* very scarce  
 above 5000 but swarming  
 in lower favorable situations.  
*Orillacris* and *Psolocera*  
 (except long winged & *Orillacris*  
 common 5100) taken on  
 grassy plain at 4600 ft

20 Specimens taken at  
 Eden New Mexico VII. 18. 07  
 were taken in low but  
 thick growth of desert  
 grass where *Oxyptera*  
 was extremely plentiful

21 Florida Mts, Luna Co. N.M. VII. 19. 1907

Specimens taken in Cañon on  
 North face of mts. at foot of  
 Arco del Diablo. *Meriania*  
*fulvifolia* on <sup>bare</sup> rocks about  
 low small bushes. It was  
 taken from an elevation of  
 5000 to 6300 the highest we went  
*Blue winged Tricentropis*  
 and *Mistobregma* scarce  
 on bare precipitous rocks  
 both vigorous and many  
 species. 4 *Guiraca* seen 3 *Thick*  
 on good area searched none  
 found lower than 5200 ft.

The walking stick insects exhibited  
 a striking resemblance to their  
 protective form and coloration  
 and would hold themselves  
 motionless with legs held  
 at stiff angles when alarmed.  
 One I experimented with  
 I found to remain so stiff  
~~even~~ when picked from the  
 bush and even when I  
 dropped it on its back  
 in the sand it remained  
 stiff and motionless.  
 The *Trimerotropis* near  
*amblyptera* were far  
 more sly and vigorous  
 than the other species  
 of the genus. One of  
*Scutiger* was shot on a  
*Agave* <sup>high</sup> near the  
 arborescent yucca.



19 Domingo, New Mexico VII. 1897  
In sandy area on each side  
of the dry bed of the Miembres  
was covered with <sup>some</sup> scattered  
growth of <sup>leafy</sup> arborescent yucca.  
In this I found 3 *Brimerotropis*  
(near *tatei*) Several  
*Brimerotropis* (striped) 1 *Vincetoxicum*  
2 *Helianthus* and ~~2 *Dioscorea*~~  
The most desolate waste was found  
in all <sup>about</sup> a mile and a half wide.  
In low green bushes in  
a scattered growth of it and  
a species of sage on each  
side of the desert. Miembres had  
we took 32 walking sticks by  
taking up twice as many  
as *Aspidopteryx*. A large *Ulmus*  
(sage) was also found but  
very scarce. <sup>juniper</sup> *Juniperus*, *Adiantum*,  
*Juniper* *Stagnantia* - In the sand  
among the *Polonia* & *Dioscorea*

sought  
 the Acrotaphi defended  
 on softly more by  
 seeking shelter in the  
 midst of the thicket near  
 the ground. The Melanop  
 was taken with by far  
 the greatest difficulty.  
 Helicaster was abundant  
 on the sands, Tricropotrope  
 quite plentiful and one  
 colony of Derolium was  
 found. Chilosterca was  
 plentiful in Mesquite  
 but extremely wary -  
 all orthoptera practically  
 was found on any except  
 the heavy clumps of  
 mesquite where collecting  
 was most difficult.

18 El Paso Texas V. 17.  
 Specimens taken on  
 raised waste covered  
 with mesquite to  
 East of the town.  
 The malanopli were  
 all taken in the  
 heavy clumps of  
 mesquite where the  
 thorns were so heavy  
 it was almost impossible  
 to get within striking  
 distance and the net  
 was used with difficulty.  
 The long winged species  
 were especially wary  
 and flew instantly to  
 the most inaccessible  
 parts of the thicket.  
 The beautiful (and larger)  
 smaller species and



16. *Alouatta* grisea. N. M. July 16, 07.  
 Taken at Station, the moth  
 on ~~the~~ screen of window in  
 day time, the ~~moth~~ attracted  
 by light.

17. *Alouatta* grisea. N. M. July 16, 07.  
~~On road in town, park.~~

Specimens of *neotoma* were  
 taken in grass under the  
 cottonwoods of the irrigated  
 park. I could hear many  
 individuals but only three  
 were taken as the grass  
 was very heavy and the  
 weather very dry. Those  
 I caught were taken in  
 an irrigated place where  
 most of the escape were  
 out of the water.

St. Louis  
Mo.

spaces of forest of conifers.  
One *Chorthippus tatum* in  
grass field. Sh-winged  
*Melanoplus* and *Hemiphysalis*  
found to be very ~~hard to find~~  
during the time before  
ten o'clock in the meadow  
where they were so abundant  
yesterday afternoon.

15

*Geothlypis* beaten from  
woods on steep hillside  
of James Canon Alt 8800 ft  
*Melanoplus atkinsoni*  
taken in same manner  
some 50 feet below.

*Perotettix* was extremely  
plentiful and then one  
*stridulation* was  
heard in every. Tues.  
this

taken there and one of same in grassy field. *Gomphoceris* the most abundant species found in greatest numbers in grassy field especially along the edge of the woods.

13 Three specimens taken under one light night VII. 12. 1907 at Alamogordo New Mexico.

14

Condorito NM VII. 15. 1907 A.M.

*Psithacillus* taken under pine and red fir in a clump of grass. *Anthophilus* taken from interior of decayed log of Douglas fir. Small *Anthophilus* taken from interior of decayed log of pine (*ponderosa*). *Anthophilus* abundant in open



12 Cloudcroft N.M. July 14. Alt <sup>8000</sup> 8700

On edge of field in open  
space among Douglas firs took 1

*Chloroceryle* - On edge of  
field among grasses took

one *Eupedetes* - a ~~strong~~ <sup>swift</sup>  
vigorous flyer. *Centropus*

taken from under dead  
bark of stump of cedar.

*Melanophaga* shortwinged  
species quite plentiful in

grassy field and in  
undergrowth in some

places in the forest.

*Circotites* quite prevalent  
on some bare hillsides.

*Melanophaga alpestris*  
a few individuals found

in one spot of heavy  
woods at mouth of James

canyon - and *Chondestes*

The sublycomorph  
 was beaten from a  
 tall green bush  
 growing in the bottom  
 of the cañon. 5300 ft.  
 Insects were all taken  
 in dead yucca -  
 a sublycomorph was  
 taken in mesquite at an  
 elevation of 5500 ft. But  
 one other immature specimen  
 was seen but no doubt  
 immature one caught by  
 net in the same locality.  
 It may have been  
 the same species. Near  
 Alamo - 5000 ft. taken  
 taken on bare ground  
 at the mouth of dry  
 cañon. Insects taken  
 in mesquite.

common in mesquite  
 there - *Proboesa* was  
 found everywhere but  
 in very few numbers.  
*Apanteles* taken from  
 steep side of dry cañon  
 alt. 5300 ft. The specimen  
 was found on bare  
 ground, growing very low  
 shrubs but was so close  
 that it almost escaped  
 capture. *Gersinia* was  
 taken on bare ground  
 from 4900 ft to 5500 ft.  
 The insects are quick  
 and powerful, jumping  
 about with great agility  
 and after springing  
 from stone to stone  
 or to a neighboring  
 plant with a light



in the street  
 drops were under  
 lights. Large moth (caterpillar)  
 seen but not caught.  
*Desiphella* plentiful, *Myrosia*  
*1 specimen taken.*  
 "

Alamo arbo N.M. July 13<sup>th</sup>  
 On ~~greasewood~~ plain between  
 the town and the mts  
 I found *Boottia* present  
 but very scarce on the  
 greasewood. In the  
 entrance of dry cañon  
 I beat one *divisoria*  
 walking stick for greasewood.  
 took three *Parabacillus*  
 in same location beaten  
 from low vegetation.  
 Saw green wingless locusts  
 all over the place found  
 by beating to be *Locust*.



The common *Trimerotropis*  
 seen there. *Melanocephalus*,  
 fairly common in certain  
 small spots. The least  
 amount of that sterile waste.  
*Littorutria* beatus from grasswood.  
 Several *Schistocerca gregaria*  
 seen but all were too shy  
 to capture and flew too  
 far over the mesa to  
 pursue. Stridulation of  
*Rostratus* is a faint <sup>irregularly</sup> ~~regularly~~  
 repeated at intervals. The  
 males <sup>irregularly</sup> ~~regularly~~ on the upper  
 limbs of the grasswood and  
 stridulate for long periods.  
 The crickets are very excited  
 and even when in their  
 holes cease stridulation  
 when you approach.  
 They are very hard to



very difficult work. *Dorotoma*  
 not common at foot of  
 mesa on level pieces of  
 bare ground. *Corbellacris*  
 taken from Mesquite where  
 it was clinging to a thorn.  
*Psolocera* everywhere among  
 barren rocks. *Pygostoides*  
*lunulatus* taken on rocky  
 hillside - only a specimen seen.  
*Haldemannella* taken on  
 summit of boulder covered  
 hill at foot of mesa.  
 Standing motionless on  
 a large pebble like a  
 toad. *Psotettix* on ground  
 of hillside also one *deltyoid*  
 taken on it. Nothing on  
 greasewood growing on  
 top of level mesa and only  
 a few *Psolocera* and

Short winged *Exelantopla*  
 and *Exelantopla* resembling  
*Funeraria* taken from  
 green weeds in field on  
 river bank. It differs  
 fairly well in this  
 locality. 3 *Hippodamia*  
 taken. ~~It~~ much scolding  
 in field over small  
 bare spots. One of the  
 plain *Microtropis* (like some  
 of taken 6) taken in dry  
 stream bed. *Dicrotusa*  
 found plentifully in colonies  
 on bare ground. *Schistocerca*  
 taken from green weeds  
 3 seen.

2 *Longius* and *Dryllodes* taken  
 from same burrow among  
 loose stones and sand at  
 the foot of a bush. It was

One large *Proculus* <sup>walking stick</sup> swept from screw bean -  
 Green phasmod swept from  
 weeds. The pure green  
*Melanoplus* was the <sup>long</sup> <sup>winged</sup> <sup>green</sup>  
 most common of the <sup>green</sup> <sup>winged</sup> <sup>green</sup>  
 species and was also  
 the most shy. Brown  
*Aerolopus* taken from screw  
 bean. A rather scarce  
 species. Green *Aerolopus*  
 common on green weeds  
 on field on river bank.

Drainage section near Rio Grande  
 El Paso Texas VIII. 1907. A few  
 until a few *Perillacris*  
 taken in a very small  
 area of short dry grass  
 by adjacent and along  
 continued branching.



Thorns of the acacia bush. The  
 net was useless. *Mercuria*  
 was also there. fairly numerous.  
 One of the short winged *Melanophila*  
 (like one taken 8) was seen  
 but escaped. Nearby in  
 dry low grass one *Lethylus*  
 and *Cordillacris* was taken.  
*Hippodamia* on bare <sup>patches of</sup> ground  
 among low weeds on river  
 bank, red legged *Trimerus*?  
 Taken in same locality.  
*Carabus* fairly common  
 on bare ground but restricted  
 to certain localities.  
 Blue winged (*Helastus*?)  
 found also on bare ground  
 but very scarce. *Litanidius*  
 swept from ground near  
 weeds. *Melanophila* plentiful  
 in wady fall on river bank.

Two immature *Locustids*  
 taken by beating greasewood  
*Melanophyes* occur on a  
*Dirotumna* taken on bare sand.

*Proctos* not nearly as plentiful  
 as on the lower mountain  
 slopes. A hard insect to  
 capture as individuals are  
 active and almost indistinguishable  
 in desert surroundings.

Trigalled section near Rio Grande  
 El Paso Texas VII. 10. The most  
 productive spots were in low  
 patches of the greasewood. There  
 the scarcer plain black marked  
*Melanophyes* was found to  
 be sometimes in few numbers  
 but it was almost impossible  
 to frighten them out into  
 the open and among the

almost barren slopes. The specimens were alert and quick to take wing. *Aspilota* most generally distributed of all species seen. *Triclistus* by far the most plentiful species. *Meloboris* in grass.

6

El Paso VII 10<sup>th</sup> On desert to the west of the Franklin's to the North East of the city. *Brachymeria* somewhat plentiful on grass. *Andrena* two specimens seen on perfectly bare. *Phaenocarpa* taken on same. One immature with clinging to piece of same. *Stenobothrus* found in ground, slow to fly but for this reason hard to sweep up. Only seen near. *Triclistus* *Triclistus*, same abundance as (5)



5 El Paso June VII.9. On Junction  
 Bandersnatch taken on brushy  
 where it took the water. It  
 was on violently when approached  
 in order to conceal itself as  
 much as possible or to fight  
 away its enemy. The two  
 32 & 34 *Diapheromera* were taken  
 from a grassy field with one  
 sweep of net. Probably in water.  
<sup>black legs on mesa only</sup>  
*Helicostes* only on low hill  
*Boottellia* mature specimens  
 were taken on upper range  
 of Pinonwood. Immature  
 specimens of all stages  
 were plentiful. Intermittent  
 taken on bare face of  
 precipitous rock where it  
 exactly blended. Numerous  
 mature were taken in  
 difficulty on the higher

1 Spofford Kinney Co. Texas. VII. 8. 07

Specimens collected beside R.R.

Collected among dry grasses.  
Encospta, very swift, somewhat  
plentiful on a path through  
grass. Trifida strong, flying  
with wind for some distance

2

Chin Noble Co. Texas VII. 8. 1907 One  
taken in wedy location.  
from recent rain. A vigorous  
specimen taken with some difficulty

3

Dowdy Medina Co Texas VII. 8. 07 *Encospta*  
taken in grassy spot during shower.  
Specimen same.

4

Johnston Comanche Co Texas VII. 8. 07 Proach  
taken from under small boulder  
*Septula* from tall dry grasses  
*Stenobothrus* from place.

